ON FICTIVE SENTENCE ANALYSIS

by Nils-Lennart Johannesson

INTRODUCTION

This paper represents an elaboration of some ideas originally put forth in my dissertation (Johannesson 1976, henceforth referred to as J76). There I proposed a system of analysis according to which certain sentences with modal auxiliaries were regarded as covert realizations of propositions referring to fictive worlds. The exposition of the fictive sentence analysis in J76 was apparently too cursory to be convincing to all readers (see Wigzell 1977), and for that reason a more detailed discussion may be called for. Further study has also shown that the fictive sentence analysis can profitably be extended to sentence types that were previously not discussed in terms of fictive worlds. In this way we will gain a higher degree of coherence in our analysis of the use of modal auxiliaries, besides seeing more clearly how the realisates of various sentence types are related to each other.

1. FICTIVE WORLDS AND FICTIVE SENTENCES

When a speaker utters a simple narrative sentence, such as (1), he uses it to describe an event that has taken place in the real world.

(1) I met Sebastian yesterday.

The proposition realized by the narrative sentence may be true or false, but even if it is false it nevertheless purports to be a description of an event in the real world. The speaker can also make a prediction of an event he believes will take place in the real world:

(2) I will meet Sebastian this afternoon.
(3) When I meet Sebastian, I will remind him of the meeting tonight.

In (3), the realisate of the first clause characterizes a point of time subsequent

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to the speech moment; it does so by referring to an event—the meeting between the speaker and Sebastian—in the real world. It presupposes the prediction (2). The second clause of (3) is used by the speaker to make a prediction of his own actions at the point of time indicated by the first clause.

If, however, the speaker does not know whether he will meet Sebastian or not, he may not want to make any predictions about events in the real world. It may nevertheless be the case that he wants to inform the addressee of what his own actions will be in case the meeting actually does take place. The speaker can then use a FICTIVE SENTENCE:

(4) If I meet Sebastian, I will remind him of the meeting tonight.

The proposition realized by the *if*-clause here serves to characterize a *fictive world*,[1] i.e., to indicate in what respect the fictive world differs from the speaker's idea of the real world. After having established the characteristics of the fictive world, the speaker can proceed to speak about events or situations in the fictive world; in the case of (4), to make a prediction of his own actions in the particular fictive world characterized by his meeting Sebastian.

It is important to remember that the speaker's prediction pertains only to the fictive world he has characterized in the realisate of the *if*-clause. Only if events in the real world develop in such a way as to make the real world correspond to the characterization of the fictive world (i.e., if the speaker actually meets Sebastian) can the validity of the prediction be attested (if the speaker does not remind Sebastian of the meeting, his prediction will have been proven invalid). Should the speaker not meet Sebastian, the question of the validity of his prediction will simply not arise.

Sentences like (4) are called *overt fictive sentences*, since both the proposition that characterizes the fictive world and the proposition that describes/predicts an event or situation in the fictive world are given full lexemic realization. The following discussion, however, will be confined to sentences that can be called *covert fictive sentences*[2]; these are sentences whose realisates, as we will see, are in some way related to a fictive world.

2. THE SEMOLOGICAL STRATUM

In order to see the significance of the *proposition clusters* postulated for the sentences discussed in the following sections of this paper, it is necessary to understand the organization of the semological stratum in the model proposed here. Although it corresponds closely to that of J76, its main characteristics will be restated here for the convenience of readers who are not familiar with that work.

As was suggested in J76, the purpose of the semology is to provide a model of how information, acquired through decoding of speech or written text or through sensory impressions, can be stored and organized in a speaker's cogni-

tive system. The semology will consequently account for semantic as well as pragmatic factors: not only will it explain why a certain proposition is semantically well-formed or not, but it will also indicate whether an utterance, the realization of one or more propositions, is appropriate or not in a given speech situation.

The emic units of the lower strata—lexemes, morphemes, phonemes—are related to each other (paradigmatically as well as syntagmatically) only by virtue of their tactic functions. The basic units of the semological stratum, the concepts or *sememes*, can be related to each other in several different ways, all of which have to be accounted for in a description of the semology. The relational network notation customarily used in stratificational grammar is particularly useful in semological studies, since it enables us to give a clear and perspicuous representation of the complex relations that obtain between sememes; taken together, these relations form the *semological network*.

A basic sememe is represented in this network as a *nection*[3] (figure 1). The upward connections of the nections lead to properties of the sememe, whereas the downward connections lead to subtypes or specific instances of the sememe. A simple network of semological relationships can be set up on the basis of a subcategorization of basic sememes, as shown in figure 2. This diagram accounts in a simplified way for some of my knowledge about three cats, Mao, Cleo, and Helen. Helen, for instance, is represented as having the three properties FEMALE, CAT, and GRAY. By virtue of being a cat, Helen can also be seen to have the properties FELINE, CARNIVORE, MAMMAL, ANIMAL, etc.

A hierarchical semological structure of this type is clearly insufficient, however, as a representation of all possible relations between sememes. Certain properties of sememes, such as the property of carnivores labeled EAT MEAT in figure 2, cannot be properly accounted for without the introduction of *propositions* as part of the semological network. A proposition is a semological construction that typically involves an *event* sememe and one or more sememes representing participants in the event. The particular property of carnivores mentioned above would be represented as in figure 3; this property

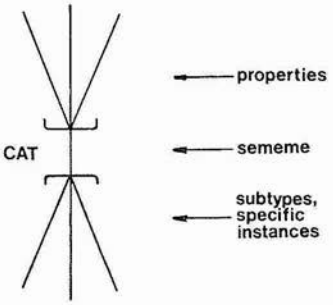

FIG. 1.

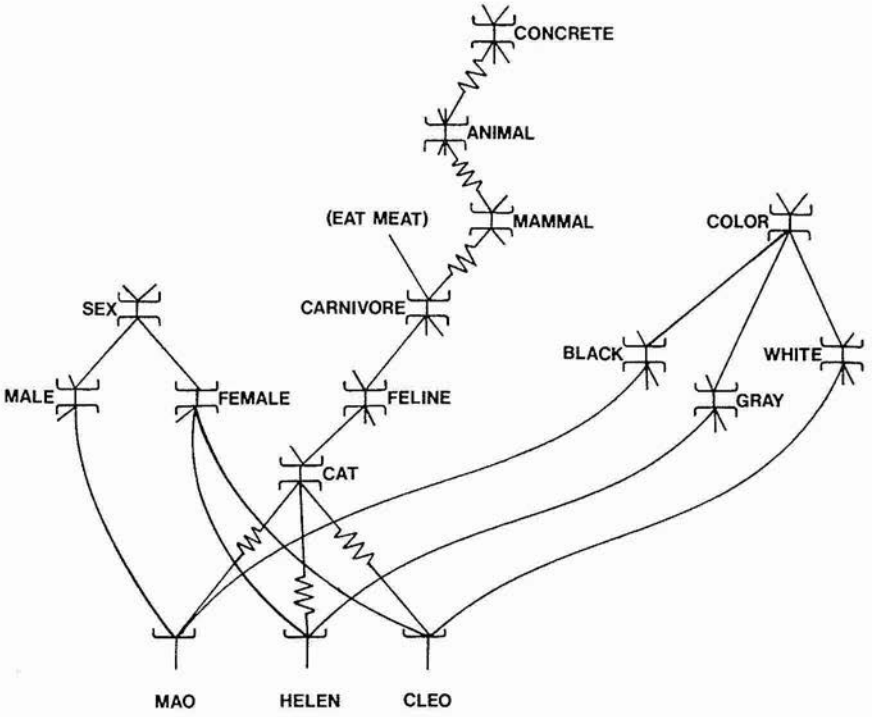
CONCRETE
ANIMAL
(EAT MEAT)
MAMMAL
COLOR
SEX
CARNIVORE
BLACK
WHITE
MALE
FEMALE
FELINE
GRAY
CAT
MAO
HELEN
CLEO

FIG. 2.

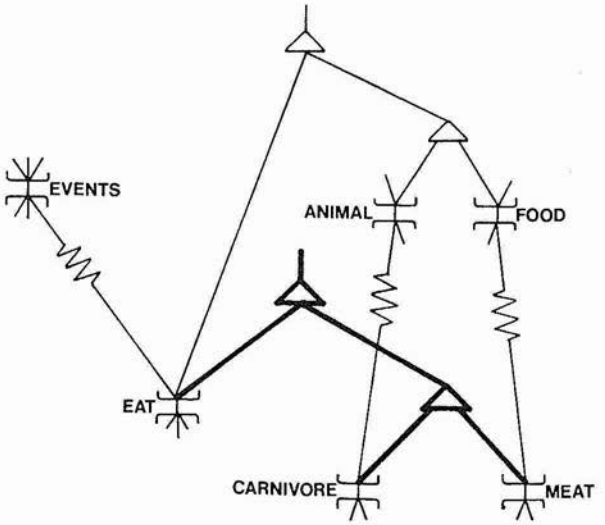
EVENTS
ANIMAL
FOOD
EAT
CARNIVORE
MEAT

FIG. 3.

is in fact only a specialization of a more general property of animals, which is also shown (in thin lines) in the diagram.

Propositions of this type are part of the semotactics; they constitute the rules that determine whether a proposition with specific reference is semantically well-formed or not. A specific instance of an event is represented by a similar construction, but with specific, rather than generic, participants. Figure 4 shows a proposition with specific reference that can be realized as the sentence

(5) Helen ate a herring yesterday.

This type of proposition can be regarded as a *macro-sememe*: it is composed of several basic sememes, but like the basic sememe shown in figure 1, it has

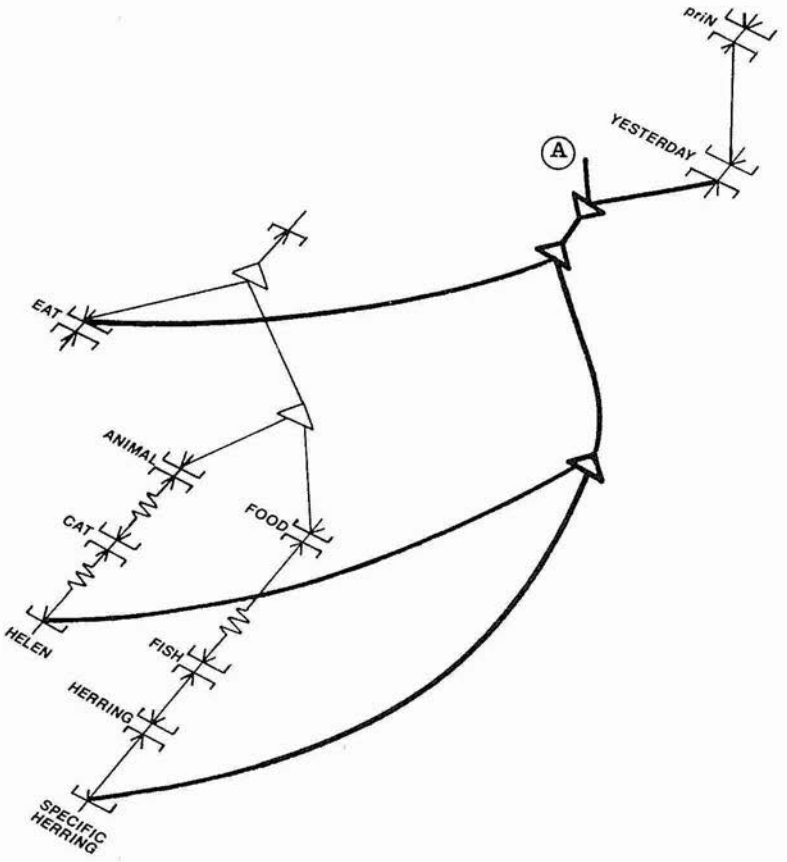

FIG. 4.

nection structure, with upward connections to properties of the macro-sememe. One typical property of a macro-sememe, shown in figure 4, is its time reference: the event is represented as taking place at a particular point (or during a particular period) of time that is specified in relation to the speech moment (prior to, simultaneous with, or subsequent to the speech moment) or, in addition, in terms of some other temporal reference system (year, date, hour, etc.). Another potential property of a macro-sememe, indicated by the empty line at Ⓐ in the diagram, is its inclusion as a participant in another macro-sememe.

The semantic well-formedness of the macro-sememe realized as (5) is shown in the diagram by the fact that the sememes that are participants in the specific 'eating' event are specific instances of the participant categories in the corresponding semotactic proposition (drawn in thin lines in the diagram).

For practical purposes it is often unnecessary to show those parts of the semological network that form the 'environment' of a certain proposition. If we are primarily interested in the internal structure of a macro-sememe, it is very convenient to use a simplified form of diagram (figure 5), which does not show the positions of the constituent basic sememes in the semological network. It must be remembered, however, that this type of diagram, which will be used in the remainder of this paper, represents only a small fragment of a much larger network. The outer ends of the lines from the macro-sememe must be regarded as connected to those points in the total semological network indicated by the labels in the diagram.

The term *proposition* will be used in the following sections both for semotactic propositions (figure 3) and for macro-sememes, propositions with specific reference and nection structure. No confusion should result from this use of the term. Proposition clusters, which will be discussed in the next section, are groups of interrelated macro-sememes. The relational network notation is particularly useful for showing clearly the degree of their interrelation. For a satisfactory account of certain sentences with modal auxiliaries (as well as for

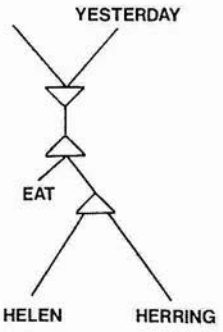

FIG. 5.

many others, not discussed in this paper), it is necessary to associate these sentences, not with single propositions, but with proposition clusters.

3. MELIORATIVE SENTENCES

In order to show how fictive worlds and proposition clusters are incorporated in the semology, I will discuss a *meliorative sentence* (see J76:83-85) in some detail in this section.

Let us imagine the following situation: John, who is a heavy smoker, says to Mary, *I wish I could get rid of this terrible cough.* After decoding this utterance, Mary forms in her semological system the representation of a fictive world, W_f, which is characterized by John's stopping smoking. In this fictive world (unlike the real world), she believes, it is possible that John will get rid of his cough; knowing John's obstinacy, however, she regards W_f as merely hypothetical. This semological structure would be represented in relational network notation as in figure 6. W_f is here represented as a sememe, a property of which is specified by the characterizing proposition $PROP_{char}$. A specific instance of W_f is represented by the proposition $PROP_1$. Mary can, if she chooses, give this part of her semological network lexemic realization and utter the overt fictive sentence:

(6) If you stopped smoking, you might get rid of that cough.

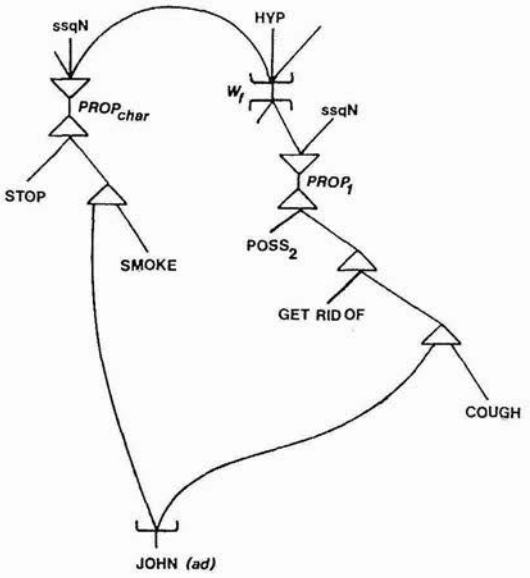

FIG. 6.

But instead of uttering (6), she may keep working within her semological system and make a comparison between W_f, the newly created sememe, and W_r, the sememe representing the real world, in which John smokes and has a terrible cough. It seems reasonable to assume that she will think that W_f, if it ever came to be real, would be a better world for John than W_r. A meliorative proposition marking W_f as better than W_r is incorporated in the semological network, and the resultant proposition cluster is shown in figure 7. The latest addition to the cluster can be realized, along with $PROP_{char}$, as sentence (7).

(7) You should stop smoking.

It should perhaps be pointed out in this connection that such a sentence as (7), in itself, is not an expression of advice. It merely indicates that the speaker holds the view that a certain fictive world with certain characteristics would somehow (it is not said in what way!) be better than the real world. If John says about himself, *I should stop smoking*, or if Peter says about John, *He should stop smoking*, they will have formed identical proposition clusters

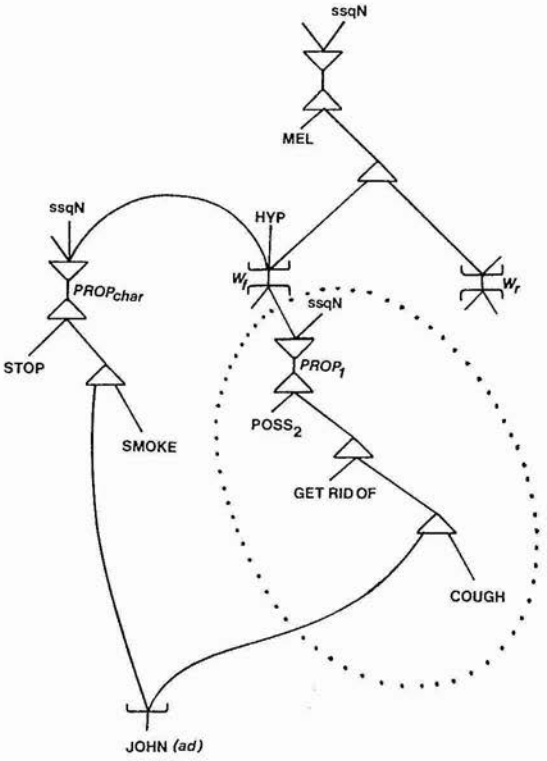

FIG. 7.

within their cognitive systems, but they are obviously not performing the speech act of advising somebody.

If Mary has determined that W_f would be better than W_r, however, this may cause her to perform the speech act of advising John to stop smoking. The proposition cluster will then be extended as shown in figure 8. The speaker (Mary) may choose to realize the relevant parts of this cluster as sentence (8).

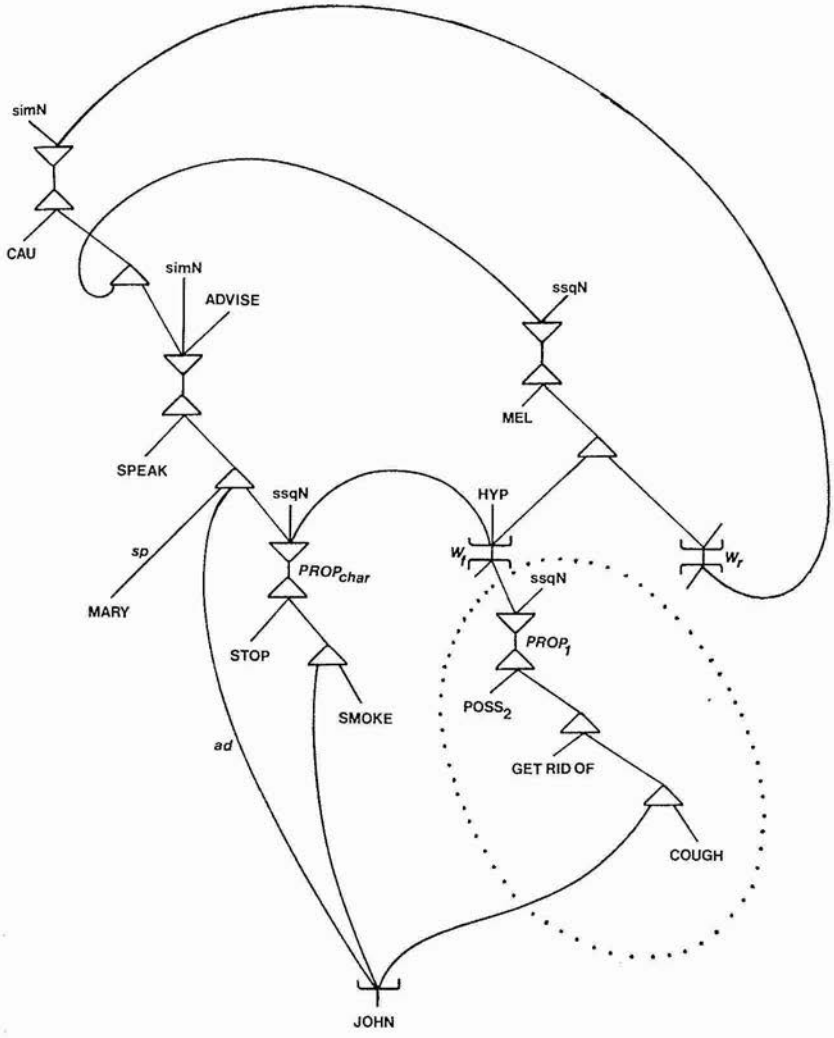

FIG. 8.

(8) I advise you to stop smoking.

But even after Mary has formed the big proposition cluster of figure 8 in her semological system, she may wish to influence John and impart her advice in a less conspicuous way than by overtly performing the speech act of advising him, i.e., without using a performative verb in her utterance. She can, as a matter of fact, still use sentence (7) for this purpose. In other words, the speaker is free to choose which part(s) of a proposition cluster she/he will give lexemic realization. A general principle for the speaker to follow could be formulated in this way: Give lexemic realization to as large a part of a proposition cluster as enables the addressee to encatalyze as much of the cluster as you want him to.[4] If the speaker does not follow this principle, he/she may fail to get his message across to the addressee (unless, of course, the addressee can guess what the speaker's intended message was). Now, when John hears (6), he will be able to encatalyze the proposition cluster of figure 6. When he hears (7), he will be able to encatalyze the cluster of figure 7, apart from the section enclosed by the dotted line, since it has not been mentioned in what respect W_f would be better than W_r.[5] Similarly, upon hearing (8), he will be able to encatalyze the cluster of figure 8 (again, apart from $PROP_1$).

It seems reasonable to assume, however, that since a cluster like that of figure 7 is so often part of a cluster like that of figure 8 in the speaker's semological system, a hearer who is decoding sentence (7) may, after encatalyzing the cluster of figure 7, by sheer force of habit incorporate it in a cluster of the figure 8 type. For this reason it is possible for a speaker to use a meliorative sentence in order to communicate her/his wish to give advice without actually performing the speech act of advising.

4. VOLITION

In the preceding section no mention was made of the speaker's volition. There is nothing in the form of a meliorative sentence to indicate whether the speaker personally wants the event represented by the $PROP_{char}$ to take place or not—the speaker can use a meliorative sentence in either case. In J76 a distinction was made between *subjective meliorative sentences*, used when the speaker's volition is involved, and *objective meliorative sentences*, used when no volition is involved. Such a distinction is, of course, valid only with reference to the realization of a known proposition cluster. A hearer, decoding a meliorative sentence, can conclude only from the character of the event represented by the $PROP_{char}$, his knowledge of the speaker and the speech situation, etc., whether the sentence shall be regarded as subjective or objective; i.e., whether the speaker's volition is involved or not. A meliorative sentence can consequently be useful for a speaker who wishes to avoid giving his volition overt expression.[6]

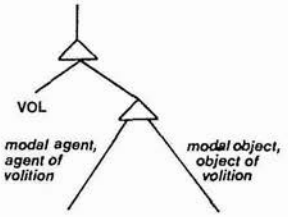

FIG. 9.

A volitional proposition (figure 9) can occur with a meliorative proposition (figure 7) in a proposition cluster. But whereas a meliorative proposition can occur in a cluster without a volitional proposition, as we saw in the preceding section, the opposite is not true. The reason for this is simply that whenever you want a certain event to take place, you will, from your personal point of view, regard the fictive world characterized by that event taking place as a better world than the real one.

If a volitional proposition is added to a proposition cluster, the speaker can choose to realize different parts of the cluster, and he can also add more components to the cluster, depending on a number of factors: on the relationship between speaker and addressee, on the speaker's assumptions concerning the addressee's readiness to perform the action, on whether the speaker regards the fictive world characterized by the object of volition coming true as hypothetical or not, etc.

I will now go on to discuss the proposition clusters that should be postulated for different sentence types expressing the speaker's volition. The list of sentence types discussed here is intended to be illustrative rather than exhaustive.

If the speaker regards the fictive world characterized by the object of his volition coming true as hypothetical, as was the case in the realisates of meliorative sentences, he can choose to give prominence to his volition, as the following examples illustrate:

(9) a. I wish you would open the window.
b. I wish the window were open.
c. I wish you had opened the window.

Figures 10a and 10b correspond to examples (9a) and (9b). If the encircled occurrences of 'ssqN' in figure 10a are replaced by 'priN,' the resulting network will represent example (9c).

An interesting characteristic of this sentence type is that it can be used to express the speaker's volition concerning events in the past that never have taken place (indicated in the relational network diagram by the fact that the modal object proposition is marked [i] as characterizing a hypothetical fictive world and having the time reference 'priN,' and [ii] as being false in the real

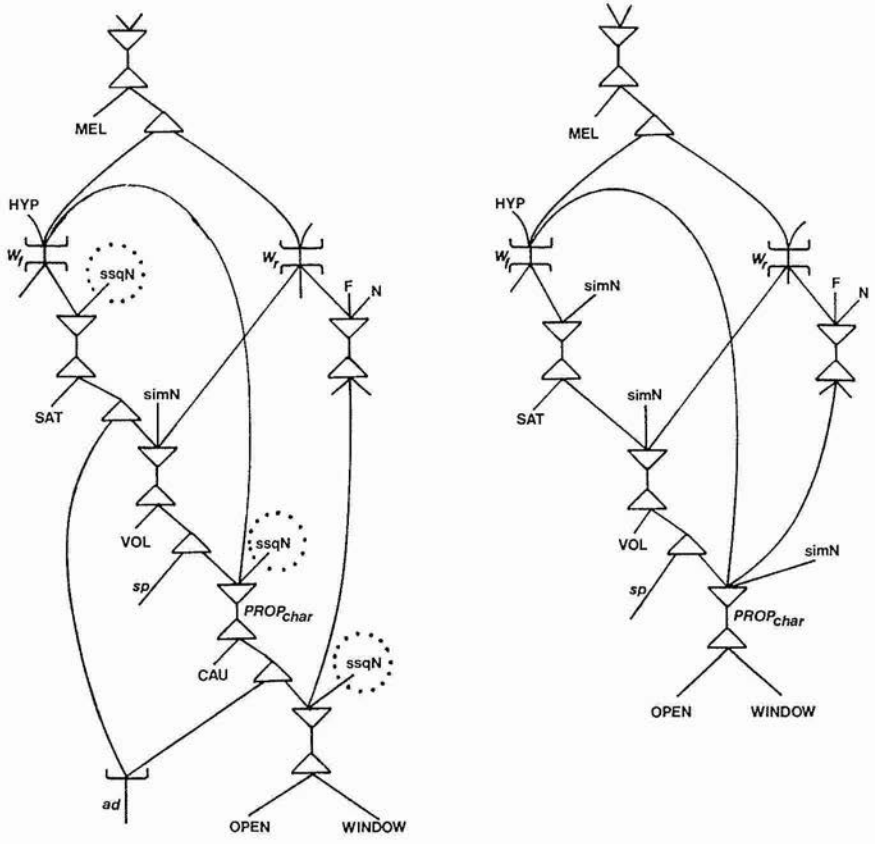

FIG. 10.

world at the speech moment). In such a case the speaker knows that his volition will never be satisfied (unless, of course, he is mistaken in his view that the event never took place at the time he wished), and for that reason this sentence type was called *desperative* in J76. The choice of this term does not mean, however, that the speaker of (9a) and (9b) despairs of the addressee ever opening the window, as was assumed by Wigzell (1977:197); if the time reference of the modal object proposition is 'priN' or 'simN,' the speaker believes that that proposition is not true at the speech moment, but whatever its time reference, it may well come true at a later time. That is, the speaker of (9c) can well believe that the addressee will open the window at a later time, but it will then be too late for the speaker's volition to be satisfied. In the same way, the speaker of (9a) and

(9b) can well believe that it is possible that the addressee will open the window at a time later than the speech moment—indeed, he can utter (9a) or (9b) solely with the intention of achieving that effect—and in that case the volition of the speaker of (9a) will certainly be satisfied, since the time reference of the modal object proposition is 'ssqN.' In that case the use of a desperative sentence conveys to the addressee that the speaker regards W_f as hypothetical. But marking an event in the future as hypothetical is not the same as claiming that it will never take place—it just amounts to indicating that one takes a somewhat dim view of the likelihood that it will take place. Thus, using a sentence such as (9a) in an attempt to make the addressee open the window may sound rather petulant, since it gives the addressee the impression that the speaker does not really count on his cooperation but regards it as somewhat unlikely that he will actually open the window.

But a speaker who wants a successful response to an utterance in which he expresses his volition has several other kinds of expression at his disposal. Let us first study the following selection of sentence types:

(10) I command you to open the window.
(11) I entreat you to open the window.
(12) Open the window!
(13) Can you open the window?
(14) You can open the window now.
(15) Would you like to open the window?
(16) May I ask you to open the window?

Of these examples, (10) and (11) are overt performative sentences, in the utterance of which the speaker performs the speech acts of commanding and entreating, respectively. It was suggested in J76 that commanding and entreating should be regarded as subtypes of imposing one's volition on an addressee; the difference between them is that a speaker who commands assumes a position of superiority in relation to the addressee, whereas a speaker who entreats assumes a position of inferiority in relation to the addressee (J76:142). In choosing an overt performative sentence, such as (10) or (11), the speaker has also chosen to give overt expression to the authority relationship he assumes towards the addressee. An imperative sentence such as (12), on the other hand, is neutral with regard to authority relations; it can be used as an expression of imposition regardless of whether the position the speaker assumes is one of superiority or inferiority. When decoding (12), the addressee has to rely on his knowledge of real (as opposed to assumed) authority relations, information supplied by voice quality, gestures, and other features in the speech context, in order to determine whether the speaker should be supposed to be commanding or entreating (or, perhaps, trying to impose his volition from a neutral authority position of equality). Since the imperative is a verb form that is typically used as

a substitute for overt performative verbs of the 'imposition' type (command, order, beg, implore, entreat, etc.), (12) must, like (10) and (11), be regarded as an overt expression of imposition.

If the speaker for some reason wishes to tone down his imposition and thus make it more palatable to the addressee, he can choose to express his volition by means of one of the sentence types (13)-(16) (or a similar, equivalent construction). Sentences of these types are not overtly marked as expressions of imposition, yet it is a well-known fact that they are conventionally used as such. Searle (1975:73-74) gives a detailed account of how an addressee would go about interpreting a sentence of the same type as (13)—*Can you pass the salt?*—uttered in a specific situation (at a dinner table) as an expression of the speaker's volition. Figure 11 shows the proposition cluster that is the realisate of (13), provided that the sentence is intended as a request by the speaker. A speaker

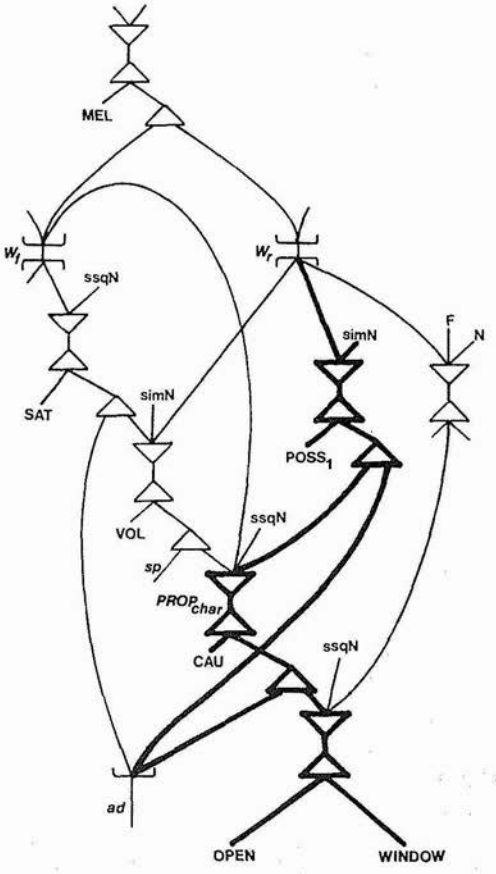

FIG. 11.

normally makes a request if he believes it is possible for the addressee to perform the action that satisfies the speaker's volition, and consequently the POSS_1 proposition is incorporated in the cluster.[7] As Searle points out (1975:69), it is possible to use, and to interpret, sentences such as (13)-(16) as if they conveyed only their literal meaning. In such a case, the realisate of (13) would be only the part of the cluster in figure 11 that is drawn in thick lines. In either case, this is the part of the cluster that is given lexemic realization by the speaker as (13). The question form is typically used when the speaker does not take it for granted that the addressee is expecting to be asked to perform the action represented by the modal object proposition; the speaker is intruding, as it were, in the addressee's doings, and indicates his awareness of this fact by his use of the question form.

In this respect there is a difference between the (otherwise identical) realisates of (13) and (14). The speaker will conventionally realize the POSS_1 proposition of a cluster such as that in figure 11 as a statement only in the following two cases:

i) The speaker believes (or he wants to give the impression, by his use of this sentence type, that he believes) that the addressee is willing, and prepared, to perform the action represented by the modal object proposition. The speaker further believes (or wants to give the impression that he believes) that the addressee is expecting him to utter a type (14) sentence, and that the utterance of the type (14) sentence will 'trigger off' the proper action by the addressee. The sentence typically contains the adverb *now* in this case.

ii) The speaker believes (or wants to give the impression, by his use of this sentence type, that he believes) that the addressee is prepared to do whatever the speaker requests in order to satisfy the speaker's volition. This may be the case if the speaker is addressing an employee, or if the addressee has just expressed his/her willingness to assist the speaker. Thus, if Mary says, *Can I do anything to help you?*[8] to John, who is painting the kitchen ceiling and beginning to feel slightly nauseated by the fumes of the paint, he will utter (17), without the adverb *now*, rather than (13).

(17) You can open the window.

(18) a. Can you tell Mr. Ryder to come in, Miss Hadley?
b. You can tell Mr. Ryder to come in, Miss Hadley.
c. You can tell Mr. Ryder to come in now, Miss Hadley.

Example (18) illustrates a situation when the speaker can have a free choice between the different types of *can*-sentence discussed above. The three sentences (18a)-(18c) could all be uttered by a business tycoon to his secretary. By using (18a), he will indicate his awareness of the fact that his request is an intrusion into the work with which Miss Hadley is occupied at the moment; by using (18b), he will indicate that he takes it for granted that Miss Hadley, as his secretary, will be at his beck and call, always prepared to do whatever

office work he requests; by using (18c), finally, he will indicate that he takes it for granted that Miss Hadley is prepared to perform the action represented by the modal object proposition.

In the realisate of (14) a new proposition, representing the preparedness of the addressee to perform the action referred to by the modal object proposition, has been added to the proposition cluster of figure 11. This proposition is shown at Ⓐ in figure 12. The realisate of sentence (17) differs from that of sentence (14) only in the scope of the addressee's preparedness, which is shown by the different position of the preparedness proposition in the semological network of figure 13.

A speaker who utters sentence (15) may, or may not, take it for granted that the addressee is prepared to do whatever he requests; there is no way to tell this

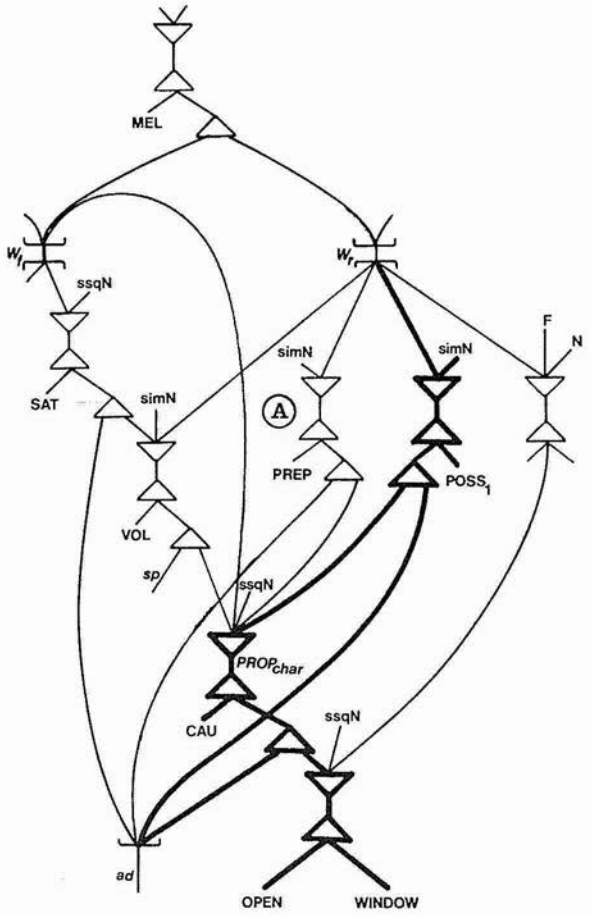

FIG. 12.

from his choice of expression. He typically uses a type (15) sentence if he regards his request as so reasonable that he is sure the addressee will be willing to satisfy his volition. But the speaker does not express this directly. Instead, he superficially asks the addressee whether he would defer to the speaker's volition[9] in a hypothetical fictive world (W_g in figure 14) with unspecified characteristics (*Would you be willing to open the window*, e.g., if I were to ask you?), being confident that the addressee will interpret his utterance as an imposition sentence along the lines suggested in Searle (1975). The realisate of sentence (15) is shown in figure 14. The proposition cluster is by now fairly complex, but only those parts of the cluster drawn in thick lines in the diagram will be given lexemic realization as a question.

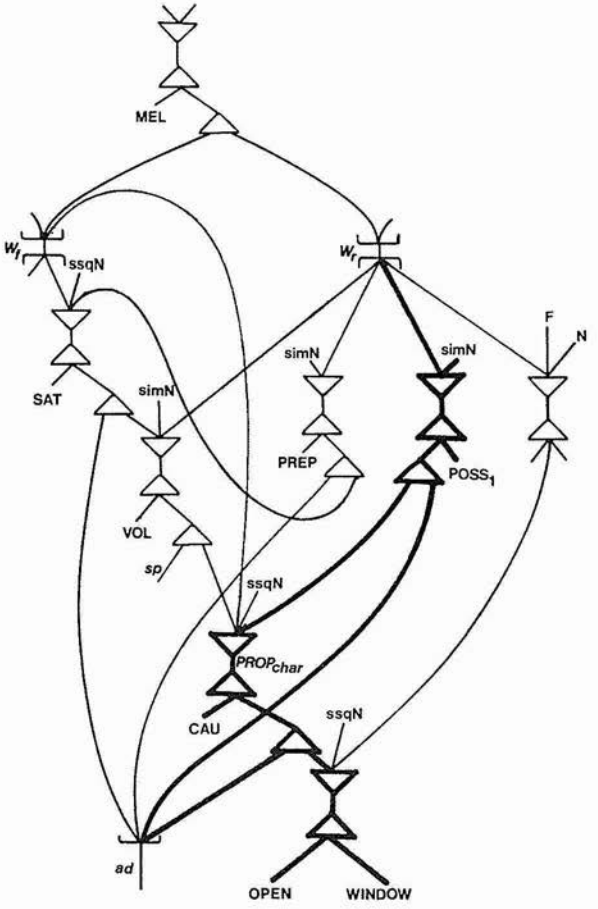

FIG. 13.

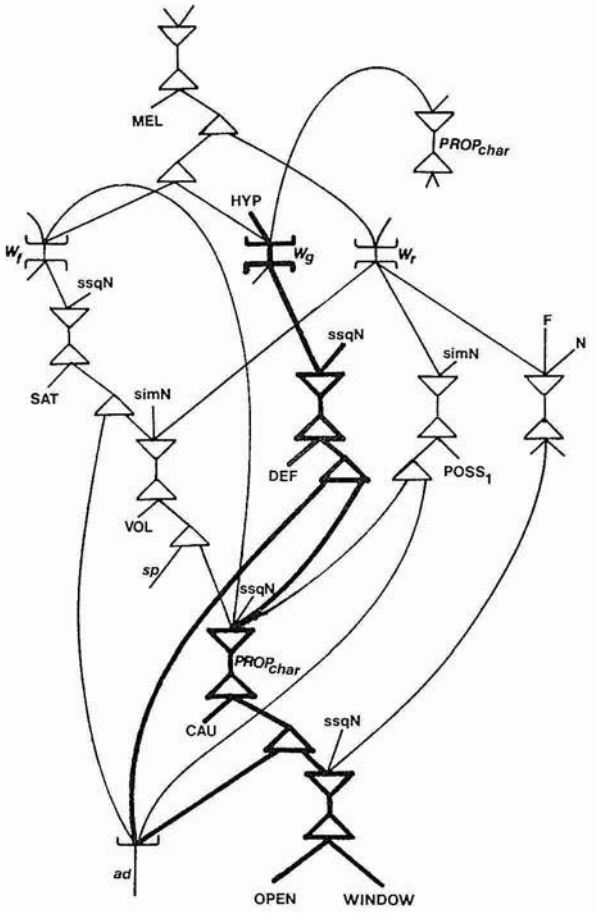

FIG. 14.

When a speaker uses a sentence such as (16)—a hedged performative sentence[10]—as an imposition sentence, he goes even further in his endeavors to detach himself, by means of his choice of expression, from the imposition of his volition. If the sentence is interpreted literally, the speaker does no more than ask the addressee to grant him permission to perform a certain speech act (asking), which in its turn will involve the speaker's imposing his volition on the addressee. But in a normal speech situation, this will count as performing the speech act (Fraser 1975:188), and (16) can consequently be used as a polite imposition sentence—for instance, when addressing a stranger in a train compartment. The realisate of sentence (16) is shown in figure 15. The dotted parts of this diagram represent the proposition that serves to hedge the

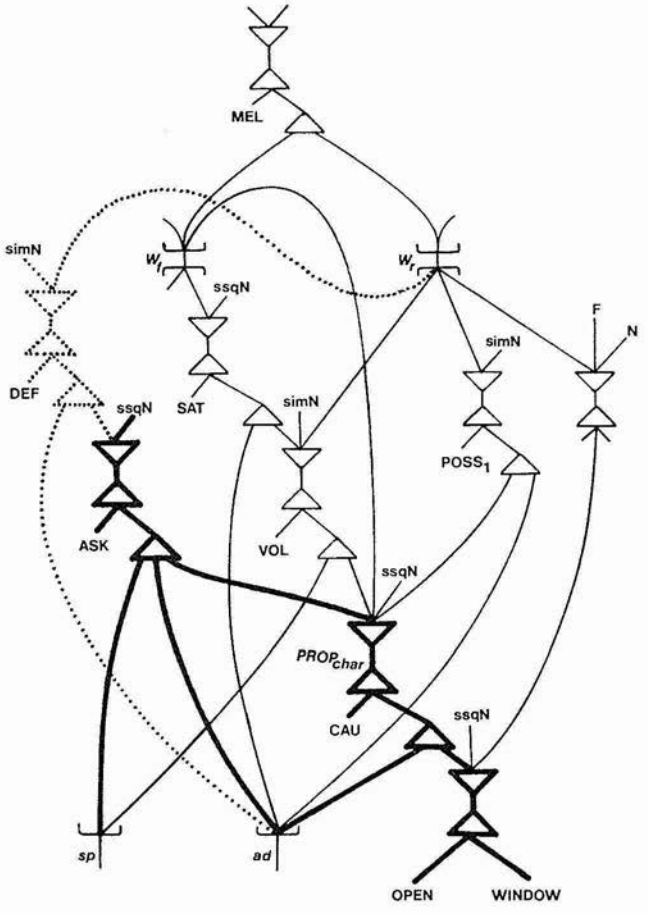

FIG. 15.

performative; it is realized as *May I . . . ?*. Those parts of the cluster that are also given lexemic realization are, as usual, drawn in thick lines.

5. ETHICAL FICTIVE SENTENCES

The category of *ethical fictive sentences* was first discussed in J76:86-90. Further study of the applicability of fictive sentence analysis has shown, however, that that category was too comprehensive and included sentence types that should properly be analyzed separately (although still in terms of fictive worlds). Some of these sentences have been discussed in the preceding section, e.g., (18), and others will be taken up in section 6 below.

The term 'ethical fictive sentence' will be retained here for that sentence

type to which it was originally applied: sentences by means of which the speaker evokes a fictive world characterized by a proposition referring to an action that is evaluated as 'right' or 'wrong' in a code of ethics or a rule system. Examples of this sentence type are:

(19) You can't move a pawn backwards.
(20) You can't call Stinky graceful.
(21) You can't go on being rude to people.
(22) I couldn't do that to an old friend.

Obviously, it is physically possible to move a pawn backwards, but such a movement violates the rules of the game. In the same way, it is possible to call even the clumsiest person graceful, but only at the cost of violating the conventions (rules) governing the applicability of that term in English. In the case of (21) and (22), finally, an unspecified ethical code is invoked.

The proposition cluster that forms the realisate of an ethical fictive sentence typically includes a meliorative proposition, but in this case the speaker regards the real world (W_r) as better than the fictive world (W_f) that is characterized by the addressee's (or some other person) doing something that is 'wrong.' Figure 16 shows the proposition cluster associated with sentence (19)[11]; only those parts drawn in thick lines are given lexemic realization.

Ethical fictive sentences can also appear as questions, used by the speaker to inquire whether a certain action would be 'wrong,' to inquire why a certain action is 'wrong,' or to inquire why the addressee (or some other person) performs an action that is 'wrong':

(23) Can I wear this tie at the reception?
(24) Can I move the king to this square?
(25) Why can't I move the king to this square?
(26) How can you call Stinky graceful?
(27) How can you be so cruel?

6. JUSTIFIABLE ATTITUDES

A sentence category that should also be analyzed in terms of fictive worlds is one that was first discussed by Larkin (1969), who, however, was forced to admit that the underlying nature of these sentences remained "a mystery." The examples given by Larkin were the following (his numbers 1a-1c):

(28) You can anticipate more conspiracy indictments in the near future.
(29) We can look forward to fewer fluctuations in the market in the months ahead.
(30) Peter can expect to receive an important promotion before Wednesday.

Other examples that should be considered in connection with these are:

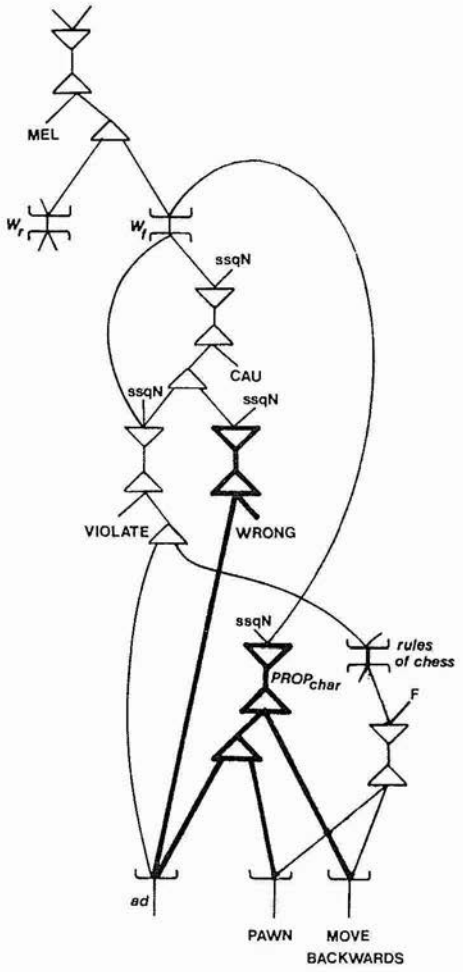

FIG. 16.

(31) You can forget about that extra money.
(32) You can consider yourself lucky.
(33) We can assume that his story is true.
(34) You can be pretty sure that the money comes from your pocket.
(35) We can take it for granted that he will agree.
(36) We can disregard Major Wylde's objections.
(37) You can abandon the idea of a vacation in Jamaica this year.
(38) We can give up all thoughts of a settlement out of court.
(39) We can conclude that Mozart did not like the flute.

The list of examples is fairly long, and it could easily be made even longer. Yet it should be obvious by now what all these examples have in common: the predicate refers to a mental attitude, and by his use of *can* in the sentence the speaker indicates that there are reasons justifying the adoption of this mental attitude. The following example may help to illuminate this function of *can*:

(40) a. I consider myself lucky.
b. I can consider myself lucky.

Both (40a) and (40b) could be uttered by a car driver who has escaped from a serious accident with only a couple of broken ribs and a mild concussion. If he uses (40a), he merely states as a fact that he adopts a certain mental attitude towards his situation (i.e., considers himself lucky). If he uses (40b), however, he indicates that there are reasons (e.g., the fact that he survived the accident) to justify his adoption of that attitude towards his situation.

In the proposition cluster associated with a sentence of this type there will typically be a meliorative proposition: a fictive world, characterized by the addressee adopting the mental attitude that the speaker thinks is justifiable, is regarded by the speaker as better than the real world. Figure 17 shows the realisate of sentence (32); those parts of the proposition cluster drawn in thick lines will be given lexemic realization.

7. SUMMARY

In this paper I have attempted to outline how certain sentences with modal auxiliaries can be analyzed in terms of fictive worlds, and how such an analysis helps us to perceive similarities between the realisates of different sentences. Furthermore, the introduction of the notions of fictive worlds and proposition clusters greatly enhances the possibilities of the semology to account for pragmatic as well as semantic phenomena; i.e., to account for the way speakers actually use sentences to convey their ideas to their interlocutors. A description using proposition clusters, only parts of which need to be given lexemic realization in order to enable the addressee to encatalyze the whole (or nearly the whole) cluster, turns out to be particularly useful for the many different sentence types by means of which the speaker seeks to impose his volition on the addressee, as was shown in section 4 above.

The discussion of the use of modal auxiliaries here should in no way be regarded as complete. In a short paper like this it is necessary to concentrate on a few illuminating cases, while a great number of other sentence types have to be left out of consideration. Even the discussion of those sentence types dealt with here is far from complete. Apart from a discussion of the proposition clusters in the realisates, a complete account of modal auxiliary sentences should include a set of encoding rules for the realization of particular propositions by the speaker and a set of decoding principles for the hearer, by means of which he will be able

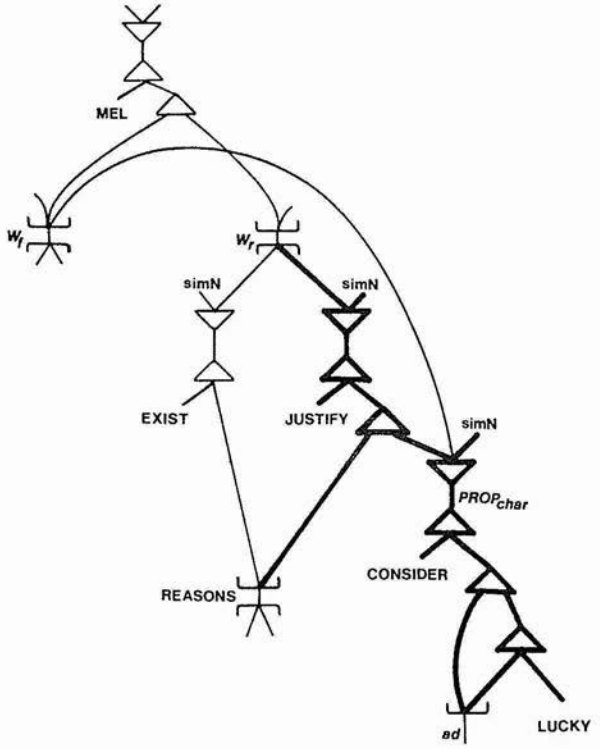

FIG. 17.

to encatalyze the proper proposition clusters in his semological network. It is also important to consider other sentence types that can be used as alternative realizations of these proposition clusters. I am convinced, however, that a study of sentence realisates using terms of fictive worlds and proposition clusters as outlined in this paper could provide a suitable basis for such a full-scale investigation.

NOTES

Abbreviations used in the semological network diagrams:

ad	addressee
CAU	cause
DEF	deference
F	false
HYP	hypothetical
MEL	meliorative, 'better than'

N	speech moment, 'now'
$POSS_1$	physical possibility
$POSS_2$	theoretical possibility, degree of likelihood
PREP	prepared(ness)
pri	prior to
PROP	proposition
$PROP_{char}$	proposition characterizing a fictive world
SAT	satisfy
sim	simultaneous with
sp	speaker
ssq	subsequent to
VOL	volition
W_f, W_g	fictive worlds
W_r	the real world

1. A more common term is *possible world*, but since the real world is one of many possible worlds, I prefer the term *fictive world* in order to emphasize the contrast between the real world and the fictive world. Similarly I use the term *fictive sentence* instead of the customary *conditional sentence*, partly to indicate that this sentence type is associated with fictive worlds, partly to emphasize the affinities between the overt and the covert fictive sentences. The latter form a superficially heterogeneous category and are traditionally not described as conditional sentences.

2. For a brief discussion of conditional sentences, i.e., overt fictive sentences, in these terms, see J76:72-81.

3. For a more detailed presentation of nections, see Lamb (1966:50); for a discussion of the representation of sememes as macro-nections, see J76:132.

4. This principle corresponds closely to Grice's (1975:45) first maxim of Quantity, "Make your contribution as informative as is required (for the current purposes of the exchange)."

5. In a case such as this, however, when the relevant proposition has just been given overt realization by the addressee, it is easy for him to infer in what respect W_f would be better than W_r. In other situations this may be much more difficult.

6. Other possible components of a proposition cluster realized as a meliorative sentence can be, besides the speaker's volition, representations of unfulfilled duty, unremedied social wrongs, etc. These points fall outside the scope of this paper, but they should, of course, be taken into consideration in a more complete account of meliorative sentences.

7. $POSS_1$, which represents physical possibility, should be distinguished from $POSS_2$, which represents the speaker's estimate of the likelihood that an event will take place. See J76:127-129. If a speaker makes a request although he believes that it is *not* possible for the addressee to perform the action, he is likely to have some ulterior motive with his request, such as wishing to humiliate the addressee by exposing his inability.

8. The analysis of this use of a question with *can* as a means of indicating willingness falls outside the scope of this paper. For a discussion of a similar use of statements with *can*, see J76:39.

9. For an analysis of willingness and permission as subtypes of deference to (real or anticipated) volition, see J76:38-41.

10. For this term, and for a discussion of other types of hedged performatives, see Fraser (1975).

11. This diagram differs somewhat from the corresponding diagram, figure 4:40, in J76:157, as a consequence of the developments of the fictive sentence analysis.

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